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CLAIMS:

- 1. A method of determining a zero point (V0) of a current sensor in a circuit for operating a gas discharge lamp, characterized by the following process steps: the current (11) through the sensor is switched off for a short period during a first half wave (13) and a first test value (V6) is determined, then the current (11) through the sensor is switched off for a short period during a second half wave (14) having a different polarity and a second test value (-V7) is determined, whereupon an average value is formed of the two test values (V6, -V7), and the zero point (Vx, V0) is determined by means of said average value.
- 2. A method as claimed in claim 1, characterized in that the switching-off takes place in two half waves (13, 14) in quick succession.
- 3. A method as claimed in claim 1, characterized in that the test value (V6, -V7) of the current sensor immediately before a renewed switch-on of the current (11) is used for determining the zero point (Vx, V0).
- 4. A method as claimed in claim 1, characterized in that an interval between two measurement groups, each group consisting of two measurements in two respective half waves (13, 14) of different polarity in quick succession, amounts to several seconds up to minutes.
- 5. A method as claimed in claim 4, characterized in that the measuring interval is varied.
- 6. A method as claimed in claim 1, characterized in that a position (t3, t4) of a current blanking interval void within a half cycle (13, 14) is varied.
- 7. A method as claimed in claim 1, characterized in that the lamp current is increased in the time before or after the current blanking interval.

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- 8. A circuit arrangement for a high-pressure gas discharge lamp implementing a method as claimed in any one of the claims 1 to 7.
- 9. A projection system with a circuit arrangement for high-pressure gas discharge lamps, the circuit arrangement implementing a method as claimed in any one of the claims 1 to 7.
- 10. A circuit arrangement for operating a gas discharge lamp by means of a square-wave alternating current (1, 11), wherein the circuit arrangement comprises a bipolar current sensor, characterized in that the square-wave alternating current (1, 11) can be switched off for a short period during a half wave (3, 4, 13, 14).